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New Epoch for Community Co-Operatives in Ireland: Factors Required For Their Implementation

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New epoch for community co-operatives in Ireland: factors required for their implementation

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1. Introduction

Over the past century co-operatives have made a significant contribution to alleviating many economic and social crises Irish society has encountered. For example, producer co-operatives have enabled farmers to gain a superior price for their produce rather than dealing with middlemen (Tucker, 1983). In the 1950s the credit union movement enabled thousands of families' access to affordable credit (Quinn, 1999).

Since the 1970s, Ireland has experienced many crises including mass unemployment, emigration and housing shortages. It was also affected by fuel rationing, emanating from our over-reliance on imported fossil fuels combined with the oil crisis of 1973 and 1977. In spite of this, co-operatives as an organisational model have not been embraced by communities and civil society organisations as tools to address the challenges arising from the crises detailed.

The paper's objectives are twofold. First, it will outline the reasons why the co-operative model has been under-utilised in Ireland. Regarding the second objective, a number of EU countries have witnessed a very significant increase in co-operatives generating renewable energy (Tahram, 2015). However, in Ireland this has been absent and the paper will examine the motivating factors for communities to establish renewable energy co-operatives and the factors that lead to their successful implementation.

The core questions being addressed are:

What are the factors that contributed to co-operatives being underutilised in Ireland?

What capacities are present in communities and how do they contribute to some communities being more receptive than others to renewable energy co-operatives (a form of sustainable development initiatives) in Ireland?

The second question in the core questions listed above is one of the subsidiary questions of a PhD dissertation which aims, first, to examine the motivations for communities engaging in the development of sustainable development initiatives, and second, to examine the capacities required by communities aiming to establish and maintain sustainable development initiatives. Third, it will examine the characteristics that distinguish successful sustainable development initiatives from unsuccessful ones.

The core question to be examined in the PhD is:

What are the key factors that lead to the successful development of locally-based initiatives that contribute to the transition from the current model of local development to a more socially and environmentally sustainable model in Ireland?

The PhD's subsidiary questions are:

- Why do some communities engage in sustainable development initiatives¹ and not others?
- What capacities are present and how do they contribute to some communities being more receptive than others to sustainable development initiatives in Ireland?
- What are the differences between successful and unsuccessful implementation of sustainable development initiatives in Ireland?

¹ Sustainable development initiatives include energy, food and up-cycling initiatives. Transport initiatives are also a component of sustainable development initiatives but are not covered in this study.

- Does the rationale for communities establishing sustainable development initiatives impact on the outcomes of these initiatives?

Section two of this paper examines the key concepts underpinning the research. The third section focuses on the factors that have stymied the development of co-operatives in Ireland to address a range of socio-economic issues. The fourth section outlines the motivations for communities to establish renewable energy co-operatives. The capacities required for the successful implementation of renewable energy co-operatives in Ireland will be outlined in section five. This paper also outlines a piece of research undertaken, the methodology of which will then be outlined in section six. Sections seven and eight detail the research findings. The discussion and conclusion is the final section of the paper.

2. Concepts

2.1. Sustainable development initiative

Sustainable development initiatives can be viewed as social enterprises with an environmental focus. Social enterprise has been defined in many different ways. Indeed, at European level there is no universally accepted definition of a social enterprise (GHK, 2006). However, the number of definitions of what constitutes a social enterprise reflects the diverse understanding of what a social enterprise actually is. Social enterprises are businesses which are democratically owned and controlled by their members. (Doyle and Lalor, 2010).

A broad definition of social enterprise is employed in this study which considers co-operatives as being a component of the social enterprise sector.

2.2. Renewable energy co-operatives

Co-operatives are 'self-help businesses owned and democratically controlled by the people who use its services' (Briscoe and Ward, 2000). The International Co-operative Alliance definition is more specific, in that it states that co-operatives are comprised of 'autonomous groups of individuals established on a voluntary basis to meet their members' needs which can be economic, social or cultural (<http://ica.coop/en/what-co-operative>).

Co-operatives throughout Europe and North America have a long tradition in the energy sector (not exclusively renewable energy), in the areas of generation, distribution and the provision of a range of associated services (Tahran, 2015). This paper will exclusively focus on co-operatives engaged in renewable energy production (one of the initiatives is structured as a company limited by guarantee but adheres to the International Co-operative Alliance seven principles).

Renewable energy co-operatives can be considered a component of the 'community energy' sector with which it shares many characteristics and principles (Walker and Devine-Wright, 2008). Indeed, literature focusing on the 'community energy' sector will contribute to the literature review.

3. Factors that have stymied co-operative development in Ireland

The factors that have stymied the development of co-operatives in Ireland will be reviewed according to following areas: economic development; politics; and socio-cultural processes. These three dimensions are deeply interwoven.

3.1. Ireland's economic development

3.1.1. Colonialisation

British colonialisation stunted Ireland's industrial and maritime development as far back as the introduction of the Navigation Acts of 1679 (Jacobsen, 1994). Ireland's role of servicing the British economy through the provision of food, mainly livestock, was compounded following the passing of the Act of the Union (McCabe, 2013). Westminster legislation prohibited Irish businesses from directly trading with other British colonies (Jacobsen, 1994). This resulted in Ireland (with the exception of the North-East) being industrially undeveloped and having a small working class (Silverman, 2001). Higher levels of co-operative activity tends to be more associated with industrialised societies (particularly consumer and worker co-operatives) than with more agriculturally based economies (Restakis, 2010; and Ranis, 2016).

3.1.2. Orthodox liberal economic policy

With the formation of the Free State, the Irish Government adhered to liberal economic policies (Jacobsen, 1994). Irish economic policy was predicated on the agricultural export of cattle, with the large grazier farmers exerting significant influence over agricultural policy (McCabe, 2013). The first government believed that if cattle farmers were generating sufficient wealth, then this would benefit the rest of society through their spending (McCabe, 2013). Any alternative economic policies would have been difficult to implement as the British government created a civil service which was supportive of their imperial interests (Regan, 1999).

Regarding Ireland's economic development, semi-state owned commercial entities outperformed indigenous private industry (Ferriter, 2004). Indeed, successive Irish governments were frustrated with the entrepreneurial performance of the Irish capitalist class (McCabe, 2013). In the 1950's, the Sean Lemass led Fianna Fáil administration concluded that the goal of autarky had failed, and replaced it with the state performing the role of facilitator of capital accumulation (McCabe, 2013). A comprador class emerged to assist foreign direct investment in establishing operations in Ireland (Eipper, 1986; and Jacobsen, 1994). Symbiotic relationships were forged between business leaders, public sector officials, and elected representatives in order to maintain the economic model (Eipper, 1986). The Irish working class was too small and weak to demand an alternative model of economic development (O'Connor, 1992).

From the 1950's, the state's model of achieving industrialisation was premised on attracting foreign direct investment rather than on building a state sponsored model of industrial enterprise (Jacobsen, 1994). This curtailed Ireland's autonomy in setting its own industrial policy (Breen et al, 1990). Fink (2007) viewed Ireland's economic model of initially relying on import substitution and then on enticing foreign direct investment as failing to integrate indigenous business with transnational companies.

3.1.3. Rural economic development

The agricultural co-operative movement emerged under of the leadership of Horace Plunkett and R.A. Anderson (King, 1991). Both were motivated to form agricultural co-operatives to address the high levels of rural poverty (Kennedy, 1978). Due to his unionist

and landlord background, Plunkett found it difficult to gain the trust of farmers (Bolger, 1977). Indeed, R.A. Anderson encountered hostilities for being a unionist and endeavouring to establish agricultural societies in nationalist areas (Bolger, 1977). Traders combined with the Catholic Church in order to curtail the diffusion of agricultural retail societies outside of the south-east of the country (Kennedy, 1978). Although, the Catholic clergy, perhaps the most influential element in rural Ireland, were actively involved in co-operative creameries, they tended not to be supportive towards the establishment of agricultural retail co-operatives, for fear of upsetting rural traders who were significant financial contributors to parish coffers (Kennedy, 1978). The Department of Agriculture was also hostile towards the rural co-operative movement and demanded that the Irish Agricultural Organisation Society (IAOS, the representative body for rural co-operatives) restrict its activities to agricultural producer co-operatives (Tucker, 1993). Although there was opposition within the IAOS leadership, Horace Plunkett acquiesced to this demand, and with it the opportunity to develop co-operatives for more marginalised sectors of Irish society was lost (Tucker, 1993).

In addition, George Russell's vision of a rural commonwealth of co-operatives where co-operatives would be at the heart of every rural community, never materialised (King, 1991).

3.2. Politics

3.2.1. The early years

The leadership of the first Free State Government was deeply conservative, and it was suspicious of any challenge to the existing class system (Ferriter, 2015). Throughout the 1920's, a counter revolution was initiated as a bulwark against perceived threats towards state institutions (Regan, 1999). There were minimal differences between the main political parties which mediated class differences, and aimed to satisfy the widest proportion of the electorate rather than endeavouring to mitigate class inequalities (Breen et al, 1990). Unlike other European countries, where there were strong social democratic political parties, the Irish Labour party was weak (Puirseil, 2007). It made a number of strategic blunders such as not addressing partition in the 1920's (Puirseil, 2007). This contributed to Fianna Fáil gaining the support of large swathes of Ireland's working class (Walsh, 1986). Therefore Ireland did not have a robust left-wing party committed to pursuing alternative models of economic development.

3.2.2. Influence of sectional interests

The welfare state failed to address inequalities through targeting social expenditure at the most marginalised (Kirby, 2010). Successive Irish governments' failure to challenge the conservative policies of Irish banks stunted industrial development (McCabe, 2013). Along with the banking sector, large farmers, those responsible for servicing foreign direct investment, and the construction industry had an unhealthy level of influence over successive Irish governments' economic policies (McCabe, 2013). This stymied the rest of the economy's development and laid the foundations for the banking collapse in 2008 (McCabe, 2013). The state has had an unhealthy fixation with the corporate sector as the primary sector charged with economic development (Allen, 2007). Furthermore, the state has been reluctant to pursue other models of economic development (Allen, 2007).

3.3. Social and cultural processes

Since the foundation of the State, the Catholic Church had a pervasive influence in every sphere of Irish life (Ferriter, 2004). The primary and secondary education system, and the social services, were, in the main, controlled by the Catholic Church (Lee, 1999). Moran (2010) asserts that the relationship with the Catholic Church legitimised the State. The Catholic Church fostered a 'red scare' which made the environment difficult for urban communities attempting to develop co-operatives (McGuinness, 1999).

3.4. **Conclusion**

This section of the paper has highlighted the factors that have contributed to the lack of development of co-operatives in urban and rural settings. These economic, political and cultural factors are interwoven. They have not created a benign environment for the development of co-operatives in Ireland, particularly in an urban context.

4. Motivations for establishment of renewable energy co-operatives

4.1. Community

With regard to sustainable development initiatives that focus on generating renewable energy, one should not view the concept of 'community' with rose-tinted glasses as being all things wonderful (Walker et al, 2010). In particular, the association of the term 'community' with a renewable energy project does not guarantee success, because some communities can be exclusionary and fractious, and boundaries of a community may be imposed. Communities that are inclusive and cohesive, with strong relationships between residents underpinned by co-operation, are more receptive to engaging community energy, including renewable energy projects (Walker et al, 2010).

4.2. Resources

Structural and symbolic resources are the two sets of factors that contribute to the mobilisation of communities engaging in social development initiatives (Bomberg and McEwen, 2012). 'Structural resources' refers to the existence of community leaders who can navigate the political structures and the policy process to gain essential resources to establish sustainability development initiatives. Pringle (2015) asserts the importance of the political context including: local, regional and national policy; funding; and access to in-kind support based on access to networks.

'Symbolic resources' are non-material resources such as the level of community identity which can be described as 'distinguishing characteristics through which individuals identify themselves with others' (Bomberg and McEwen, 2012). This mutual identity, argue Bomberg and McEwen (2012), contributes to feelings of solidarity which can lead to realisation of shared norms and reciprocity. In Canadian rural villages, Dale, Ling and Newman (2008) identified high levels of affinity with place, which they concluded could contribute to a high number of sustainable development initiatives. On the other hand, they also noted instances where this affinity could present a barrier to the acceptance of new ideas.

The role of 'citizen pioneers' (Pringle, 2015) is pivotal in the in mobilising communities to engage in renewable energy co-operatives.

Spear (2006) states that instead of an individual, often portrayed as the white knight, a 'citizen pioneer' is a team of people from within and outside a community, that is usually pivotal to the establishment of social enterprises, including renewable energy co-operatives.

While acknowledging the impact of individuals with expertise who provide communities with the information and skills to establish sustainable development initiatives, Seanor and Meaton (2007) conducted research which highlighted that it is 'teams of people' which make things happen. Doyle (2009) acknowledged that although an individual with a combination of credibility and expertise can identify a sustainable development concept, this is not sufficient: the central involvement of a group of community leaders or a community development organisation is essential if the sustainable development initiative is to flourish.

4.3. Desire for autonomy

A desire for autonomy is recognised as a motivating factor in mobilising communities to develop renewable energy co-operatives, in particular to gain greater control over their energy supply (Pringle, 2015).

Walker (2008) elaborated on the concept of autonomy, to identify the following motives in establishing sustainable development initiatives focusing on renewable energy:

- Provides a source of income generation for communities and a focus for local regeneration. In so doing, it can galvanise the local economy;
- Supplies households with a cheaper supply of energy (heat and electricity) than energy corporations;
- Enables local control over the process of developing renewable energy initiatives;
- Enables community leaders to put into practice their ethical and environmental values.

4.4. **Economic motives**

Walker's (2008) assertion regarding the supply of cheaper energy is supported by Chittum and Ostergaard (2014), who highlight how Danish district heating systems that are mutually owned by the customers can lead to lower cost supply of heat to households.

Regarding local economic development, Leicester et al, (2011) identified employment generation and the provision of necessary infrastructure for industrial development as motives for developing sustainable development initiatives including renewable energy co-operatives. Furthermore, sustainable development initiatives can be a mechanism for the social and economic regeneration of rural communities (Hain et al, 2005).

4.5. **Ecological motives**

Wuste and Schmuck (2012) asserted that ecological factors were the primary reasons for communities developing community renewable co-operatives. A commitment to the environment was also considered by Lokhurst et al, (2013) as being a primary reason for establishing community energy co-operatives – a form of sustainable development initiatives.

The urgent need for a transition to low carbon energy systems was considered the primary driver for communities establishing renewable energy initiatives in the Netherlands (Hufen and Koppenjan, 2015).

5. Capacities

5.1. Challenges encountered

The capacity of sustainability development initiatives to make communities become more positively disposed towards renewable energy is dependent on location and the pre-existing norms towards renewable energy (Devine-Wright et al, 2007). Urban communities tend not to have as strong a sense of community as rural communities, and consequently there can be a lower level of co-operation than in rural communities (Weatherall et al, 2012). Communities can face challenges in securing sufficient capital to develop renewable energy co-operatives. International experience suggests that community ownership is capable of accommodating a high number of investors, because community-owned structures are prepared to handle a high volume of relatively small investments. Therefore, they have the capacity to achieve a wider range of investment (Barry and Chapman, 2009).

Sustainable development initiatives (including renewable energy co-operatives) tend to be driven by a small cadre of volunteers who generally give a lot of their time to the development of such initiatives (Seyfang, 2007). However, their enthusiasm can often lead to them becoming 'burnt out', and isolated from other residents in the community who may not share their passion for sustainable development initiatives (Middlemiss and Parrish, 2010). Therefore, an examination of the capacities critical to the implementation of successful renewable energy co-operatives could assist communities and policy-makers alike.

5.2. Theoretical framework

There are four categories of capacity which constitute the theoretical framework.

Pringle (2015) defines individual capacity as the level of skills, values, and finance that individuals within a community possess which can assist in the formation of sustainable development initiatives (including renewable energy co-operatives). Middlemiss and Parrish (2009) assert that an individual's social context shapes their capacity to initiate sustainable development initiatives.

The structural capacity of a community is concerned with the culture and values pertaining to organisations within a community that have an influence over communities' efforts to implement sustainable development initiatives (Middlemiss and Parrish, 2009).

Infrastructural capacities refer to the stock of infrastructure that is present in communities which is conducive to the drive to promote sustainability (Middlemiss and Parrish, 2009).

Finally, cultural capacity refers to the level of commitment and openness to sustainability that exists within a community. The cultural capacity is influenced by the historical context towards sustainability commitment to sustainability. Middlemiss and Parrish (2009) assert that the above four capacities are interlinked and each can have an impact on another.

5.3. Capacities required establish renewable energy co-operatives

5.3.1. Community involvement

This section of the paper will outline why some communities are better placed than others to succeed in establishing renewable energy co-operatives.

With regard to individual capacity, the greatest challenge to increasing the incidence of community energy projects – this concept encompasses renewable energy co-operatives - is getting the average citizen involved in community energy (Hoffman et al, 2010). However,

the norm seems to be that a cadre of community activists develop community energy projects while utilising a hierarchical structure (Seyfang, 2007).

Developing a successful community energy project is predicated on recruiting community members and maintaining their participation. It is important to recruit individuals beyond the initial core enthusiasts. Personalised recruitment processes and personal appeals can be effective at recruitment. Community-based organisations can be a contact point for people to get involved in community energy projects. The recruitment strategy and maintaining participation is brought about by an association and appreciation of a place - whether this is an affinity to a neighbourhood or attachment to a specific attribute in a place (Hoffman et al, 2010)

Rogers et al (2008) observed that the majority of members of sustainable development initiatives preferred to have minimal involvement in operational and strategic dimensions of the project, and instead preferred to be kept informed of developments. Therefore, practices that promote this level of involvement are critical. If the leadership in renewable energy co-operatives value the importance of community participation, then it is more likely that communities become more receptive to community energy including renewable energy co-operatives (Rogers et al, 2008).

5.3.2. Expertise

Assuming that sustainable development initiatives recruit residents, there are a number of key skills that individuals need during the planning, mobilisation and developmental phases (Seyfang et al, 2014). These can be categorised into interpersonal, technical and organisational skills.

With regard to interpersonal skills, confidence, emotional stamina, and communication skills were deemed crucial to the development of successful sustainability development initiatives including renewable energy co-operatives (Seyfang et al, 2014). The technical skills cited include the capacity to design and interpret financial management reports, knowledge of renewable energy technology, and management expertise (Walker, 2008). The organisational skills that key individuals required were the capacity to undertake meaningful consultations and to make effective decisions. Van der Horst (2008) considered the vision and styles of leadership of key members as being critical to the success of sustainable development initiatives including renewable energy co-operatives.

5.3.3. Structural capacities

With regard to structural capacities, the presence of community organisations and supportive state and local development institutions can contribute to overcoming a range of barriers. The structural capacities required to address a number of issues can be outlined as follows:

- An absence of start-up capital can be addressed from residents' financial investments, and from financial support from state institutions.
- The achievement of financial sustainability can be assisted through community organisations either providing direct financial support by purchasing services or promoting the service.
- Gaining local approval and securing planning permission can be facilitated by having the support of community organisations (Walker, 2008).

Strong relationships with community organisations and state agencies can lead to them either directly performing the role of animator of community energy projects (including renewable energy co-operatives) or providing funding for communities to secure the necessary expertise (Walker et al, 2008).

The development of community renewable energy (of which renewable energy co-operatives are one component) can contribute to influencing citizens' attitudes and behaviour towards sustainability, which can result in new sustainable development initiatives being developed (Walker et al, 2010). Tuke (2005) describes social networks arising from interactions between residents, community organisations, and renewable energy co-operatives which result in higher levels of social acceptance of renewable energy co-operatives because of trust in the organisations promoting them.

6. Methodology

6.1. Case selection

Five case studies were selected from the whole of Ireland. These constitute the five renewable energy co-operatives that are operational on the island of Ireland. By selecting case studies from the whole of the island, this will enable the research to identify similarities and differences in the capacities required to develop renewable energy cooperatives in both jurisdictions.

The four community gardens selected were:

- Aran Islands Renewable Energy;
- Claremorris and Western District Energy Co-op;
- Drumlin Wind Energy Co-op;
- Northern Ireland Community Energy Co-op;
- Templederry Community Wind Farm.

Four of the case studies are structured as Industrial Provident Societies while Templederry is incorporated as a company limited by guarantee, but adheres to the International Co-operative Alliance's principles.

6.2. Methods

Semi-structured interviews were held with five individuals with expertise in co-operatives in Ireland. The purpose of these interviews was to gain their insight into the factors which have stymied the development of co-operatives in Ireland. In addition, semi-structured interviews were held with key individuals who were associated with the five renewable energy projects co-operatives. The interviews were held, in the main, at the interviewees' respective work places or close to where they lived, and they lasted between forty minutes and one hour. Due to time constraints, it was only possible to conduct focus groups with one of the committees responsible for the governance of the renewable energy projects. However, it is planned to seek focus groups with the remaining four over the summer period.

6.3. Data collection and coding

A list of trigger questions (see Appendix 1) was used to guide the interviews, and some additional questions were posed, depending on each interviewee's responses. All interviews were audio-recorded and transcribed verbatim.

6.4. Analysis

Qualitative thematic analysis was employed to formulate themes from the transcripts (Braun and Clarke, 2006). The process entailed reading each of the transcripts a number of times in order to become familiar with the data. The text of each of the transcriptions was then coded. Section seven describes the phase of the research which examined the factors that have stymied the development of co-operatives in Ireland, and the following three themes were identified: Ireland's economic development; politics; and social and cultural processes. The second phase of the research examined the factors which led to the development of renewable energy co-operatives, and eight themes were identified: community self-sufficiency; leadership; trust; social processes; partnership; community engagement; sustainability; and innovation. The codes and associated data were categorised under the relevant themes.

7. Factors that have stymied cooperative development

7.1. Ireland's economic development

A number of sub-themes will be employed to detail the research findings associated with the theme of Ireland's economic development.

7.1.1. Colonialisation

A number of interviewees stated colonialisation, particularly from the 1800's onwards, restricted the growth of Irish industry.

"if you look at what happened after the Act of Union, the Irish industrial sector declined from 1801 onwards, and it was only with independence and with a forced kind of protectionist growth policy that Irish business in many traditional sectors started to expand"

Therefore, with a small industrial base, the point was made that this limited the number of opportunities for co-operatives to be formed. One individual spoke about the limited amount of capital available to workers to establish co-operatives.

7.1.2. Rural co-operatives

One interviewee spoke about members of the landowning class in the 1880s, most notably Horace Plunkett, introducing agricultural co-operatives to rural Ireland. The Nationalist Party, leaders of the land league, and sections of the Catholic clergy were hostile to the landowning class's attempts to establish co-operatives, because of their allegiance to preserving the union and their class position. Although, Plunkett and his associates were successful in establishing co-operatives, their attempts to establish rural consumer co-operatives were not, due to a combination of the following factors:

- Traders had a hold over tenant farmers as they provided credit which enabled farm families to purchase goods prior to selling produce;
- The Catholic clergy were predominately drawn from the middle class, a high proportion of which were traders, so their sympathies tended to lay with protecting the interests of shopkeepers;
- A dependency culture to outside experts prevailed in parts of rural Ireland where there were high levels of poverty.

7.1.3. Solidarity economy

Interviewees spoke about the absence of a solidarity economy in Ireland. According to a number of interviewees, the credit union movement did not provide much support for the establishment of co-operatives.

7.1.4. Economic model

The point was mentioned that the Irish State pursues a facile form of economic development which serves the interests of the comprador class and of foreign direct investment. The former is a cohort of builders and professional groups, including solicitors. It was mentioned that the main political parties in Ireland have close ties with the comprador class.

A number of interviewees spoke about the current economic model being so pervasive within the political establishment that no other alternative models are considered.

"the job is always just to suit capital, suit that class of people, that's the purpose of this State, it has no other purpose really regardless of the consequences to the Irish people"

... I think history proves that to be the case, so that's the group-think, they all think that's how the economy should be run, then there are absolutely no alternatives"

7.1.5. Financial institutions

One interviewee spoke about financial institutions having a perception of co-operatives as being less stable than capitalist enterprises. The interviewee attributed this concern to co-operatives' democratic structure, where there is a perception of every member having an equal input into decision-making.

"that is a huge problem because banks don't trust the governance of co-ops and so on, it seems to me they're less likely to lend to co-ops who probably haven't got capital and assets in the same degree as conventional businesses and there's worries about, you know, I suppose leadership and strategy, if everything has to be run past 20 people, you know, and everybody speaks for five minutes there's the afternoon gone, you know."

According to interviewees, commercial banks' lack of understanding of co-operatives' governance structure makes them reticent in providing finance to co-operatives. The point was made that this issue of perception must be addressed.

"Well the first issue we have to look at the financial question; that seems to me to be the biggest obstacle. If you form a co-operative you will find difficulty in getting the money"

One interviewee spoke about the European Investment Bank targeting a portion of the loan fund for small businesses at co-operatives.

7.2. Politics

A number of sub-themes will be employed to detail the research findings associated with the theme of politics.

7.2.1. Political and trade union tradition

The point was made that the absence of a vibrant, progressive social movement in Ireland was a primary reason for there being a weak co-operative movement in Ireland.

"it was very unlike the co-operative movements that emerged in Spain and Italy which were always Marxist or left wing or socialist, it never came from that tradition which I think was one of its weaknesses, then again you could argue that was the same for the Irish labour movement, and the Irish left broadly, as it had a very tiny Marxist edge to it, and broadly speaking, it was quite socially conservative and economically conservative in that way as well. So I think the emergence of co-ops or the lack of emergence of a broad co-operative movement here has the same routes as the lack of an emergence of a progressive left in Ireland as well"

A number of interviewees spoke about the absence of socialist leadership following the executions of James Connolly and Liam Mellows as creating a void in the socialist leadership. The point was made that the absence of a credible leadership was a fundamental weakness in the Irish left's attempts to progress a social revolution and to stem the counter-revolution which was initiated in the 1920's by the Cumann na nGaedheal government.

In addition, it was stated that the absence of anti-clericalism was a factor that contributed to their being a weak co-operative movement. According to interviewees, the Catholic church was a socially conservative institution, and was suspicious of movements that challenged its authority.

Unlike in Italy, France and Spain, trade unions in Ireland, in the main, were not supportive towards co-operatives. A view was expressed that - with the exception of one trade union - the trade union movement is not prepared to invest in increasing awareness and supporting the development of worker co-operatives. Instead, the trade union movement has been engaged in increasing awareness of social enterprise which has a narrow definition in Ireland.

7.2.2. Role of the state

Interviewees spoke about the State not being supportive towards the development of co-operatives. It was mentioned that this was manifested in the closure of the worker co-operative unit (located in FÁS) and the limited attention policy makers have afforded to updating Industrial Provident Society legislation. Indeed, a view was articulated that the co-operative unit was not of a significant strategic importance to FÁS.

“and so when the Fianna Fáil government closed down the Co-operative Development Unit in 2002, that’s just an extension of that kind of attitude, what do you need co-ops for, sure look at the place it’s booming? Celtic Tiger, everything is great, close that nonsense down you know, who needs solidarity and social bonds and, you know, sustainability”

With regard to credit unions, it was stated the Central Banks prevented them from diversifying into new products during the economic crisis. The view was expressed that this decision was made because the credit union sector is perceived as undermining the dominant positions of retail banking sector. It was stated that the credit union movement should be providing a full suite of financial services to its members.

According to one interviewee, the state needs to move from short-term to long-term planning to address the issues Irish society will be confronted with in the decades to come. A long-term perspective needs to be adopted in order to develop robust plans for developing local economies and the view was that co-operatives have a key role to play in this regard. A view was expressed that credit unions should financially support co-operative development. Interviewees spoke about how the State, through restructuring state procurement, could increase the size of the co-operative sector. According to one interviewee, this could enable the State to realise objectives such as meeting its international obligations to addressing climate change and environmental degradation.

The point was made that local authorities’ policy of allowing individuals to build single houses in the countryside is a major obstacle to the challenge of attaining sustainability. This leads to significant challenges manifesting, such as limited broadband coverage, deficits in rural transport, limited increase in the uptake of renewable energy, and challenges in maintaining the vibrancy of villages. One interviewee suggested that Ireland needs one national body for planning.

7.2.3. Institutional support

According to a number of interviewees, the absence of an institutional support system for co-operative development is a significant barrier to the development of co-operatives in the Republic of Ireland. The most effective approach would be to deliver supports on a regional basis and independent of the State. Interviewees spoke about a key function of a support structure would be to signpost groups of individuals interested in establishing co-operatives to individuals with the relevant business sector expertise in co-operatives.

There were varying opinions on whether local development agencies should have any role in delivering supports to co-operatives. One interviewee suggested that the local development companies could be charged with the responsibility of providing expertise to communities regarding the establishment of co-operatives. In contrast, a number of interviewees spoke of local development agencies not being allocated the role of providing

supports to co-operatives, as they do not have the affinity to undertake the work. Instead, a view was expressed that support should be provided by an institution similar to the UK Co-operative Development Agencies.

7.2.4. Policy-makers

Interviewees spoke about senior civil servants not being supportive towards co-operatives. A number of interviewees mentioned that this could be addressed through providing them with information on the benefits of co-operatives to society, particularly in relation to their economic performance. The point was made that policy makers are most receptive to learning from UK policy and best practice.

The point was articulated that civil servants perceive co-operatives as being less stable entities than capitalist enterprises. This arises from co-operatives being democratic entities which civil servants believe can undermine their governance.

“I think there still is, a concern about the general fragility of co-operatives, they’re not seen as being so stable or secure because of people all having an equal voice and that means potential for disagreement is higher and I suspect that that worry about co-operatives pervades policy through the decades.”

7.2.5. Legislation

Interviewees mentioned the need for legislation to place Industrial Provident Societies (IPS) on a stronger footing in relation to covering member liability, protecting against de-mutualisation, facilitating mergers, and reducing the number of members required to form an IPS.

7.2.6. Political support

Interviewees spoke about the need for political parties to make policy demands on the State to be more supportive towards co-operatives. One interviewee outlined how State procurement policies could strengthen the co-operative sector, as is the case in other European countries.

7.3. Social and cultural processes

A number of sub-themes will be employed to detail the research findings associated with the theme of social and cultural processes.

7.3.1. Ideology

Interviewees spoke about the Catholic church’s social teaching which exerted a strong influence over the majority of the population in the South. They added that this made it a difficult environment to establish co-operatives in urban areas.

A number of interviewees spoke of Irish society not having a value system that prioritises equality, or social solidarity. Instead, charitable interventions are the favoured approach. A number of interviewees attributed these values to Ireland’s attachment to land and private property.

“Going back to the land war and you know the commitment, the attachment to private property is very strong and there’s less, less attention paid to the commons if you like, what they call the commons and I think that’s very, I mean when you see a vacant space in Ireland you assume it is some, owned by some developer who is sitting on it to make a profit you know.”

7.3.2. Lack of working class unity

Interviewees spoke about how the working class was diffused in purpose by the desire to achieve a united Ireland and the influence of Catholicism. This undermined the Irish working class the capacity to address class issues.

7.3.3. Institutional legacy

A number of interviewees spoke of how colonialisation has contributed to the creation of a dependent, passive culture. Catholicism also copper-fastened this tendency to be passive. An opinion was expressed that in the past, communities tended to wait for the imprimatur of the local Catholic clergy before responding to issues.

7.3.4. Passive working class

The point was made that many working class individuals do not want the responsibility of co-ownership that is associated with workers' co-operatives. Instead, they solely want to receive a wage at the end of the day. Interviewees attributed this to their experience of working as an employee. One interviewee referred to this as working-class disempowerment which can be associated with working in capitalist enterprises.

"Well one of the cultural factors for worker co-ops that we're involved in is disempowerment, working class disempowerment. The xx Co-op...is a very successful business, is struggling not because of business, not because of profits, because the women who are coming to work for it don't want to be co-operative owners, they want to be workers, they just want a weekly wage, they want to come, they don't want to take responsibility, they don't want to be trained up, not all of them but the majority of them, and there's a mentality amongst all that class of just complete .. defeat nearly"

7.3.5. Co-operatives limited presence

Interviewees referred to there being no tradition of co-operatives in Ireland, particularly in urban areas. Indeed, interviewees spoke about a lack of awareness amongst the population of credit unions being co-operatives. As a result, interviewees spoke about co-operatives not being considered as an option for a proportion of the workforce to gain a livelihood.

"one the lack of tradition...it's hard to point to a good example of one in Ireland"

To address this, the point was made that co-operative bodies need to allocate resources to increasing awareness of co-operatives. For instance, co-operatives should be on the syllabus of different courses in secondary school.

8. Renewable energy co-operatives

The research findings with individuals associated with renewable energy co-operatives are outlined according to a number of identified themes.

8.1. Community self- sufficiency

A number of sub-themes will be employed to detail the research findings associated with the theme of community self- sufficiency.

8.1.1. Motivation

Economic self-sufficiency was the most common motive articulated by interviewees for establishing renewable energy co-operatives. In particular, interviewees also mentioned that self-sufficiency provided the potential to generate both employment and income reserves, which could benefit their communities socially and economically. One interviewee spoke of environmental and social motives being the primary reason for establishing their renewable energy co-operative. Furthermore, interviewees spoke of subsidiary motives including their co-operatives serving as a demonstration model to other communities and as a community response to climate change.

8.1.2. Internal expertise

Interviewees spoke of committee members possessing a wide range of expertise which enabled the realisation of the co-operatives objectives.

- Engineering expertise- one of the co-operators was an engineer who had expertise in developing wind turbines;
- Technical expertise – two co-operatives had committee members who were tradesmen;
- Financial expertise – a number of the co-operatives had committee members who had business knowledge and financial management expertise.

8.1.3. Finance

Interviewees spoke of the challenges of securing adequate funding to undertake the following: establish the renewable energy co-operative; engage with the community; complete feasibility studies; purchase the technology; and gain grid connection. Most of the interviewees mentioned the share capital obtained from members that enabled the co-operatives to commence operation.

“The €100 shareholding was the kick-start which enabled us to keep going”

Interviewees spoke of having to gain finance from shareholders, equity finance schemes, state grants, and loan finance. According to a number of interviewees, issuing a share offering was challenging because of the lack of awareness of renewable energy initiatives when the share offering was initiated. This led to the installation of the wind turbine being delayed.

“It caused delay on projects so we couldn’t proceed as fast as we would have liked because we couldn’t raise the cash fast enough and that wasn’t without a lot of effort you know we had a very large marketing budget for x, I think we spent £50,000 on marketing, we had radio, national newspapers, I think adverts you know we were holding so many community meetings and going to every event you could imagine with a x stall for months on end and so we definitely saturated, you know, all mediums that we could, so in the end I can’t remember the exact percentage but a large percentage

of our investment came from GB as opposed to Northern Ireland even though both projects were wholly within Northern Ireland.”

A number of interviewees spoke of partnerships with manufacturers of wind turbines which reduced the challenge of securing sufficient finance to purchase wind turbines. Even though such arrangements eased the challenge of securing finance, one interviewer stated that a number of the members of one co-operative had to give personal guarantees on loans.

8.1.4. Autonomy

A number of interviewees spoke of energy self-sufficiency arising from co-operatives as providing the stepping stone for developing other co-operatives. In addition, several interviewees mentioned that energy self-sufficiency achieved by co-operatives would allow communities to develop their own local economy.

“We’ve become a bit like local government with a fund of our own to spend so this leads to secondary benefits and [we] use them to create employment and to broaden out the economy because the economy really is only tourism at the moment”

One interviewee spoke of the fact that the co-operative was similar to a community of interest, as opposed to a geographic community, allowing the co-operative to select the best sites for wind turbines.

“...so communities tend to be located in specific area, it depends on the type of communities, if it’s a community of interest or community of a certain locality, and that because I had started at a stage where I was a step back from that I could look across the whole of Northern Ireland and choose the best sites for the wind turbines”

8.1.5. Control

A number of interviewees noted that because communities are aware that they control the process of developing a renewable energy initiative, this increases participation in the process. According to several interviewees, communities can have control over the development of their economic development via co-operatives. One interviewee spoke of the plan for their community to control energy production and distribution via their co-operative.

“And the system and structure that will distribute it will buy and sell it, we want to own the company that buys and sells it and we want to own the energy itself obviously, not just the turbine”

8.1.6. Community benefit

Several interviewees spoke of social and economic benefits that accrue to communities as a result of establishing renewable energy co-operatives. The benefits cited were:

- Non-governmental organisations gaining income
- Generating income to initiate other co-operatives
- Diversification of local economies
- Partially address unbalanced regional development

8.2. Leadership

Three sub-themes will be used to detail the research findings associated with the theme of leadership.

8.2.1. Champion

A number of interviewees spoke of the importance of their respective co-operatives having an individual who is willing and has the time to commit to performing a number of crucial roles. One interviewee referred to this person as being a champion.

"I would say you need one person, it's me in this case, who is prepared to take it...and do whatever it takes. I would say a champion is essential"

Two interviewees spoke of the champion identifying the idea for developing a renewable energy co-operative and persuading a number of individuals to form a co-operative. Interviewees identified champions as building relationships with key individuals in State agencies, third level institutions, and with private businesses. Two interviewees stated that champions played a pivotal role in the negotiations associated with securing finance. According to two interviewees, champions must be accountable to the co-operative governance structure.

8.2.2. Developer-led

One interviewee used the term 'developer-led' to describe the role he performed prior to the formation of the co-operative. During the developer-led phase, this individual bore the risks associated with any setbacks associated with the erection of a wind turbine and the costs incurred.

"Yeah so I guess you know I put in my time and cash you know because there was expenditure required in the planning permission, putting up wind speed masts and you know all of those, I bore those costs initially and any failures were along the way, not every site that I approached turned out that was suitable or I could get planning permission for so I bore those costs"

8.2.3. Collective

A number of interviewees spoke about the relevance of the governance structure associated with a co-operative. This entailed deciding upon a vision, aims and objectives. The point was made that this provides the committee with direction and aids cohesion. Several interviewees emphasised that having individuals with the relevant expertise is essential, but equally as important is for committee members to undertake agreed tasks between meetings.

"Once a month is not going to achieve anything, you know all of the stuff that gets done in between meetings you know that people are willing and able and have the time and the energy to spend on it"

Interviewees commented that when committee members spend time undertaking tasks, then this strengthens their commitment and fortifies their sense of ownership of the co-operative.

8.2.4. Resilience

Interviewees were of the opinion that setbacks can be encountered which requires resilience on the part of members of the co-operative governance structure. Interviewees recounted setbacks emanating from within the community such as its proposed plans being rejected at community meetings, and being confronted by numerous obstacles such as those associated with gaining the process of gaining a power purchase agreement and gaining finance from commercial banks.

8.3. Trust

Four sub-themes will be used to detail the research findings associated with the theme of trust.

8.3.1. Familiarity

According to a number of interviewees, co-operatives are positively viewed in light of the economic benefits that agricultural producer co-operatives have generated for farmers. This association benefits renewable energy co-operatives, according to the same interviewees. Interviewees also spoke of the importance of investing time in raising awareness of community renewable energy co-operatives through holding information meetings, consulting the community, and spoke about the importance of the co-operative having a physical presence in the community.

“We opened an office in the town, it gave us a public display of what the co-op was about so that it gave us a public awareness, that was important”

8.3.2. Credibility

One interviewee spoke of a renewable energy co-operative gaining credibility through administering a state-funded residential retrofitting programme. This initiative reduced the risk of households experiencing fuel poverty. According to the interviewee, this highlighted to the community that the co-operative intended to undertake activities which improved residents' quality of life. The point was made that the term co-operative is easy to understand compared to a company limited by guarantee, as it is associated with being democratic.

A number of interviewees emphasised how easy it was for a co-operative to lose credibility within its community. To ensure this did not occur, interviewees referred to the importance of the leadership having with no conflicts of interest.

8.3.3. Community leaders

Interviewees referred to co-operative committee members who were trusted by the community as mitigating community resistance to the work of renewable energy projects.

Interviewees noted that a key characteristic of some co-operative committee members was being well connected to senior officials in state agencies and having good relationships with other community leaders.

8.3.4. Solidarity

One interviewee spoke of the solidarity displayed by households who bought shares in the co-operative on a number of occasions.

“There are approximately 30 people in [local town] that are shareholders and it was kind of like milestones where they went back to the community on a number of occasions to increase their investment based on, you know, certain milestones and certain criteria [that] were met...each of those shareholders increased their [shareholding], so that's, that was where the core funding came from”

Another interviewee noted that household solidarity will be required in order to purchase energy from the renewable energy cooperative, if it is to become financially sustainable.

One interviewee stated that a subsidiary of its renewable energy co-operative is providing guidance and investment in other renewable energy co-operatives.

8.4. **Social processes**

Three sub-themes will be used to detail the research findings associated with the theme of social processes.

8.4.1. Committee interaction

A number of interviewees spoke about their committees making decisions through consensus. Several individuals mentioned that their committees regularly dedicated some committee meetings to planning and reviewing performance. They attributed this practice as being one of the key factors to their respective co-operatives attaining their goals and promptly addressing issues in the community.

“Yeah, how to give and take, how to listen to each other, and how to form a consensus yeah, to talk through it and talk through a situation, we’re good at that here”

8.4.2. Community regeneration

According to several interviewees, individuals believed that their renewable energy co-operatives contributed to the regeneration of their areas. Two interviewees spoke about this impact being maximised as members waived their right to a dividend from their shareholding.

8.4.3. Participation

According to a number of interviewees, renewable energy co-operative members invested time in engaging with residents with a view to inviting them to become members of their respective co-operatives. One interviewer spoke of how community participation increases when residents see the benefits of community energy ownership.

8.5. **Partnership**

Three sub-themes will be used to detail the research findings associated with the theme of partnership.

8.5.1. Building relationships

Interviewees spoke of the time required to cultivate relationships with key individuals associated with external organisations.

“Cultivating relationships...you have to go to meetings, you have to have time to go to meetings, and then you have to explore with them what we could do together.”

One interviewee referred to the importance of engendering enthusiasm towards the co-operative amongst representatives of organisations, and this requires renewable energy co-operative members to tell a compelling story of the work being undertaken. Two interviewees stated that a pre-requisite of developing effective relationships is that the prospective partner likes you.

8.5.2. Mutually beneficial relationships

Several interviewees spoke of the importance of identifying what the prospective partner could gain from forming a partnership with a renewable energy co-operative. Interviewees mentioned beneficial relationships being formed with third level institutions, private sector companies, and other co-operatives. A number of interviewees mentioned the partnership

between their co-operatives and with Templederry CRES² as overcoming a number of obstacles renewable energy co-operatives currently encounter.

“CRES is trying to follow that model, you know where that if there are surpluses coming into CRES, that that surplus can be used to guide and to help other communities around Ireland develop their own community energy solution locally”

A number of interviewees stated that forging relationships with privately-owned energy businesses can mitigate the challenge of securing the necessary funding.

“But it was Enercon [that] had experience in Europe of green... projects and they could see the challenges that were happening, so they were very supportive of Templederry to try and get the turbines installed”

8.5.3. External expertise

One interviewee noted that his own renewable energy co-operative governance structure does not possess individuals with all of the necessary expertise to successfully establish a financially sustainable renewable energy project. Therefore, he asserted that committees must identify gaps in their expertise. To compensate for this lack of expertise, several interviewees spoke of securing external expertise from organisations that they work well with. One interviewee stated that gaining expertise from another co-operative was a positive experience, as it was committed to increasing the number of renewable energy co-operatives.

Two interviewees spoke of establishing a partnership with an already operational renewable energy co-operative as an effective way to learn from the errors that they made. A number of interviewees mentioned that partnerships assisted them to pilot new renewable energy technology, secure finance, and provided technical assistance regarding issuing a share offer.

8.6. Community engagement

Five sub-themes will be used to detail the research findings associated with the theme of community engagement. A number of interviewees expressed the opinion that their renewable energy co-operatives undertook different forms of community engagement.

8.6.1. Community consultation

A small number of interviewees spoke of their committees prioritising consultation with their communities. Methods of consultation included community meetings and individual discussions with residents.

8.6.2. Maintaining communication

According to a number of interviewees, maintaining communication with their communities was a significant challenge because of the level of time required in performing this task. One interviewee spoke of education meetings on renewable energy as proving an effective mechanism to engage with residents. Newsletters, questionnaires, and social media were other approaches used to maintain contact with residents.

² CRES is Ireland's first fully community owned electricity supply company. It is a sister company to Templederry Community Wind Farm in County Tipperary, Ireland's only operational community-owned wind farm.

8.6.3. Accountability

Interviewees spoke of implementing protocols to ensure committee members were accountable for their actions.

“There has to be procedures put in place that make us accountable and, like, keep an eye on every aspect of...the activity of the committee, you know, not just the money, the money is obvious, but all the other aspects as well. So for example, I’ve initiated that whenever I write an email in relation to the co-operative there’s two people on the committee that I send a copy to so there’s no private email for me to send...it’s a committee, it’s a committee email, I write it but two other people on the committee get to read it”

A number of interviewees spoke of their committees devising a code of governance. According to the members of one committee, they compiled a set of criteria which would determine the location of the site for their wind turbine. The same cohort of interviewees believed that committing to these criteria has strengthened the level of trust between the committee and the community.

“Once people saw that we were going to commit to those four criteria and then we came up with a site that fulfilled those four criteria people were happy, that’s why we got a unanimous ‘yes’”

8.6.4. Awareness

Several interviewees emphasised the importance of holding awareness-raising events about renewable energy projects’ plans for the establishment of renewable energy installations. A number of interviewees spoke of such events as reducing local opposition to the establishment of renewable energy projects.

“...you deal with nimbyism straight on, right in its face, you deal with it, you educate, demonstrate, you don’t give up you know, you empower.”

According to one interviewee, renewable energy co-operatives must find out the reasons why people are opposing the installation of renewable energy technology in their communities, and the committees must strive to address the reasons underpinning the resistance. However, the same interviewee spoke of small minority who may not be convinced and that this cohort should not be afforded the right to block progress.

8.6.5. Community support

Among interviewees, co-operative renewable energy governance structures used different criteria to decide whether or not to erect or install renewable energy technology. A number of interviewees spoke about proceeding to seek planning permission to erect a wind turbine only if there was unanimous community support for the location of the development.

“In this community and in such a small place, I don’t think you could do anything, it would be impossible to do anything without backing from the community. If the majority of the community were against us, it just would be a no-go and it would be a waste of time to try and cut it, it just wouldn’t happen”

A number of interviewees spoke about the damage to friendships and relationships between neighbours if the community’s view was not respected with regard to the location of wind turbines.

Another interviewee held a different perspective, stating that there can be a small minority of individuals who will consistently oppose the co-operatives plans and this cohort should not be afforded the right to stall the co-operative’s work.

8.7. Sustainability

Three sub-themes will be used to detail the research findings associated with the theme of sustainability.

8.7.1. Environmental sustainability

One interviewee spoke of the establishment of the renewable energy co-operative as a manifestation of the community's commitment to preserving the environment. Indeed, a number of interviewees spoke about their co-operatives' efforts, and that these will increase awareness of both climate change. One interviewee spoke of the surplus income generated by the co-operative's wind turbines being used to fund environmental awareness programmes in schools.

8.7.2. Economic sustainability

A number of interviewees spoke of the economic benefits that will accrue to their communities, such as reducing the leakage of household income from local communities.

8.7.3. Project sustainability

A number of interviewees spoke of their co-operatives forming a partnership with Templederry CRES to sell their energy, as opposed to dealing with a privately-owned utility company. Interviewees mentioned that co-operatives will get a better price per unit for their electricity from Templederry CRES than from other utility companies.

8.8. Innovation

Four sub-themes will be used to detail the research findings associated with the theme of innovation.

8.8.1. Regional focus

One interviewee suggested that communities should adopt a regional perspective to identify sites to erect wind turbines. The same interviewee mentioned that a renewable energy co-operative could be formed involving a number of communities. This would facilitate the selection of the best sites for wind energy.

8.8.2. Policy

A number of interviewees raised a number of obstacles which make it difficult for renewable energy co-operatives to operate, as follows:

- The connection fees to the grid, which are considered very high;
- The conditions imposed by the energy regulator, which make it difficult for a co-operative that is a licensed supplier to the electricity grid to increase the size of its customer base;
- The size of the collateral fund that energy suppliers are required to place with the relevant state agency, which makes it difficult for co-operatives to supply into the national grid.

Interviewees spoke about the importance of establishing an incentive scheme targeting small-scale energy generators. This would facilitate communities to establish renewable energy co-operatives.

"Then whenever the government incentivised smaller operations up to 250kw well then that was like, ok, well that sets a whole new different set of constraints, and opened up a whole lot of other opportunities, so if the subsidising of smaller sectors enables smaller players to enter the market because the big companies are only interested in

the big fish, they're not interested in the little half million turbine because it's not big, they can't pay the wages to do that, so by artificially capping you know the project size as they did in Northern Ireland to about half a million pounds, that created an opportunity that smaller players could operate in."

8.8.3. Technological

One interviewee spoke of renewable energy co-operatives being good partners for third level institutions and private businesses to pilot new technology, because renewable energy co-operatives' membership have knowledge of the best locations for new technology to be tested. Another interviewee mentioned combining different renewable energy technologies to maximise the coverage of renewable technology. Finally, the point was made that renewable energy co-operatives can gain credibility by piloting innovative renewable energy technology.

8.8.4. Community

A number of interviewees were of the opinion that the EU directives on smart grids and smart metering could facilitate an increase in the total proportion of energy generated by renewable energy co-operatives.

9. Discussion and conclusion

This paper has illustrated that a range of factors has stymied the potential for co-operative development in Ireland to be realised. Colonialisation had a profound impact on Ireland's economic development limiting the process of industrialisation (Jacobsen, 1994; and McCabe, 2013). Successive Free State governments of the 1920's pursued liberal economic policies (McCabe, 2013). Both of these factors combined to create an environment that was not conducive to the establishment of co-operatives, with the exception of agricultural producer co-operatives (McCabe, 2013). The adverse economic environment for co-operative development was compounded by the dominant social and cultural norms which favoured charity over solidarity, private property over collective ownership, and a social conservatism influenced by Catholicism (Breen et, 1993; Eipper, 1986; Ferriter, 2004; and Powell and Geoghegan, 2004). In addition, the absence of a strong socialist movement in Ireland was deemed a contributing factor for the lack of development of co-operatives, particularly in urban areas (Ranis, 2010; and Restakis 2010). The research findings were consistent with the literature in identifying the factors that stunted co-operative development. The research pointed to a number of additional factors which restricted co-operative development. The State has not been supportive towards the development of co-operatives. There is an absence of co-operative identity in Ireland: for example, credit unions are seen as financial institutions as opposed to co-operatives. Financial institutions perceive the co-operative model as being fundamentally weak with regard to governance.

Communities are mobilised to establish renewable energy co-operatives primarily to achieve both autonomy and economic benefits (Huybrechts and Mertens, 2014; and Bauwens, 2013). The research findings regarding the motives for the establishment of renewable energy co-operatives, were consistent with the literature. Other motives identified, such as enhancing environmental awareness, were deemed secondary.

Pringle's (2015) theoretical framework focuses on the capacities required for the successful implementation of community renewable energy projects (which includes renewable energy co-operatives) in rural settings. Although this is a robust framework, when applied to Irish communities it may require some modification to detail the capacities required to successfully implement renewable energy co-operatives. With regard to individual capacity, urban communities, particularly marginalised communities, tend to have a smaller cohort of individuals with the skills, knowledge and values to initiate community renewable energy projects. This could have repercussions for the amount of time these individuals need to invest to ensure that the co-operatives become operational. Community leaders could become over-committed which could lead to personal repercussions, due to their enthusiasm (Seyfang, 2007). Therefore the framework could be adjusted to specify the importance of empowering novice members. With regard to social capital, some communities, particularly socio-economically marginalised neighbourhoods, may not have the knowledge about how to engage with the local government system, in order to secure both land and other resources to establish a renewable energy co-operative.

With regard to infrastructural capacities, given that the demand for land is higher in urban than in rural settings, the framework needs to take account of the challenges in securing land. In relation to cultural capacity, the majority of communities would not have a history of developing renewable energy co-operatives, and therefore values associated with their establishment should be broadened. These values could include those that focus on self-sufficiency and collective economic development, as these values were identified as the key motives for the establishment of the majority of the renewable energy co-operatives in Ireland.

The research findings indicate that renewable energy co-operatives encounter a number of challenges. Therefore, resilience within the governance structure of renewable energy co-operatives could be included as a component of the theoretical framework. An independent support structure could assist communities to develop renewable energy co-operatives.

The theoretical framework could be broadened to acknowledge the critical importance of the amount of volunteer time that is required to ensure that a renewable energy co-operative becomes operational. Furthermore, the style of collaboration between committee members contributes to the success of renewable energy co-operatives. In particular, a consensus approach to decision-making was considered as an important factor in the successful establishment of renewable energy co-operatives. The theoretical framework does not place much weight on the importance of community engagement. Innovation within the renewable energy co-operative was considered important to address the barriers encountered. Therefore, innovation should be also included in the framework.

The framework also does not place much emphasis on the values that exist among residents, as opposed to those that pertain to individuals active among community organisations. This is an important factor when one considers the level of resident resistance in Ireland to the installation of renewable energy technology.

There is a wealth of research which outlines the societal benefits of renewable energy co-operatives (Tahram, 2015). Therefore, it is incumbent on the Irish State to develop policies in assisting communities to establish community renewable energy co-operatives. These policy areas include procurement, legislative reform, finance and access to the national grid.

Finally, the EU's directive on smart grids presents opportunities for renewable energy co-operatives. Therefore, research is required to identify the supports for renewable energy co-operatives to contribute to the operation of smart grids.

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11. Appendix

11.1. Core questions used in semi-structured interviews and focus groups

Phase 1

- What do you consider were the factors that led to the emergence of co-operatives (e.g. credit unions, producer co-operatives) in Ireland?
- What were the challenges in establishing co-operatives unions in Ireland? How were they surmounted?
- What were the reasons for the state and civil society organisations not embracing co-operatives to address socio-economic issues in Ireland?
- Given your experience of the co-operative development, what do you think needs to be done to encourage there to be more co-operatives in other sectors of the economy aside from credit unions and agricultural co-ops?

Phase 2

- How did the idea for a renewable energy co-operative energy emerge?
- What were the motivating factors for individuals to develop a renewable energy co-operative in your locality?
- What were the reasons for embracing a co-operative structure as opposed to a different organisational structure?
- What is the primary focus of the renewable energy co-operative? (economic, education regarding environment, ecological)
- What were the essential skills/expertise required to transform the idea for a renewable energy co-operative from a concept to generating energy?
- What were the resources required to establish the renewable energy co-operative?
- Did you require resources and supports from outside your community? If so, what were they? Where did you source them? How did you source them?
- What were the challenges encountered in establishing the co-operative? How were these overcome?
- Has the community developed a formal organisational structure? What are the criteria for membership?